

Building an image using a Dockerfile. The same command is rerun to see the caching behavior of `docker build`

```
Administrator: Command Prompt - powershell

[+] Building 266.3s (7/7) FINISHED
=> [internal] load build definition from Dockerfile 2.3s
=> => transferring dockerfile: 141B 0.1s
=> [internal] load .dockerignore 2.0s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/ubuntu:16.04 0.0s
=> [1/3] FROM docker.io/library/ubuntu:16.04 4.9s
=> [2/3] RUN apt-get update 204.6s
=> [3/3] RUN apt-get install -y iputils-ping 49.9s
=> exporting to image 3.6s
=> => exporting layers 2.9s
=> => writing image sha256:3b7a8c27c3aff4a298ae6b7e38cdf24f46ec1b8f92247bb0b192f53cc7a589f1 0.2s
=> => naming to docker.io/blueaxis/ping 0.1s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
PS D:\BlueAxis\Documents\UPD\Code\school\197\ME8_Containerization_and_Docker\3-building_images> docker build -t 'blueaxis/ping' .
[+] Building 3.1s (7/7) FINISHED
=> [internal] load build definition from Dockerfile 1.9s
=> => transferring dockerfile: 31B 0.0s
=> [internal] load .dockerignore 2.3s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/ubuntu:16.04 0.0s
=> [1/3] FROM docker.io/library/ubuntu:16.04 0.0s
=> CACHED [2/3] RUN apt-get update 0.0s
=> CACHED [3/3] RUN apt-get install -y iputils-ping 0.0s
=> exporting to image 0.5s
=> => exporting layers 0.0s
=> => writing image sha256:3b7a8c27c3aff4a298ae6b7e38cdf24f46ec1b8f92247bb0b192f53cc7a589f1 0.1s
=> => naming to docker.io/blueaxis/ping 0.0s
```

```
Administrator: Command Prompt - powershell

PS D:\BlueAxis\Documents\UPD\Code\school\197\ME8_Containerization_and_Docker\3-building_images> docker images
REPOSITORY          TAG         IMAGE ID      CREATED        SIZE
blueaxis/ping        latest      3b7a8c27c3af  3 minutes ago  169MB
ubuntu              16.04      aefd7f02ae24  2 weeks ago   134MB
PS D:\BlueAxis\Documents\UPD\Code\school\197\ME8_Containerization_and_Docker\3-building_images>
```

## Building an image using an optimized Dockerfile

```
Administrator: Command Prompt - powershell
PS D:\BlueAxis\Documents\UPD\Code\school\197\ME8_Containerization_and_Docker\3-building_images> docker rmi 3b7
Untagged: blueaxis/ping:latest
Deleted: sha256:3b7a8c27c3aff4a298ae6b7e38cdf24f46ec1b8f92247bb0b192f53cc7a589f1
[+] Building 50.4s (4/5)
=> [internal] load build definition from Dockerfile 0.7s
[+] Building 270.0s (6/6) FINISHED
=> [internal] load build definition from Dockerfile 0.7s
=> => transferring dockerfile: 315B 0.0s
=> [internal] load .dockerignore 0.9s
=> => transferring context: 2B 0.0s
=> [internal] load metadata for docker.io/library/ubuntu:16.04 0.0s
=> CACHED [1/2] FROM docker.io/library/ubuntu:16.04 0.0s
=> [2/2] RUN apt-get update && apt-get install -y iputils-ping && apt-get clean && cd /var/lib/apt 265.6s
=> exporting to image 2.5s
=> => exporting layers 2.0s
=> => writing image sha256:d1f1f4faaf277a2be8f0f53110a9fc169fd5cd0ba6bba4681927c3e8d2d63e50 0.1s
=> => naming to docker.io/blueaxis/ping 0.1s

Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
PS D:\BlueAxis\Documents\UPD\Code\school\197\ME8_Containerization_and_Docker\3-building_images> docker images
REPOSITORY          TAG             IMAGE ID        CREATED         SIZE
blueaxis/ping        latest          d1f1f4faaf27   27 seconds ago  138MB
ubuntu               16.04          aefd7f02ae24   2 weeks ago    134MB
PS D:\BlueAxis\Documents\UPD\Code\school\197\ME8_Containerization_and_Docker\3-building_images>
```

## Automatically running ping google.com using directives in the Dockerfile

```
Administrator: Command Prompt - powershell
Use 'docker scan' to run Snyk tests against images to find vulnerabilities and learn how to fix them
PS D:\BlueAxis\Documents\UPD\Code\school\197\ME8_Containerization_and_Docker\3-building_images> docker run -it blueaxis/ping
PING google.com (142.250.204.46) 56(84) bytes of data:
64 bytes from 142.250.204.46: icmp_seq=1 ttl=37 time=25.5 ms
64 bytes from 142.250.204.46: icmp_seq=2 ttl=37 time=30.9 ms
64 bytes from 142.250.204.46: icmp_seq=3 ttl=37 time=30.5 ms
64 bytes from 142.250.204.46: icmp_seq=4 ttl=37 time=30.3 ms
^C
--- google.com ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3005ms
rtt min/avg/max/mdev = 25.540/29.335/30.914/2.205 ms
PS D:\BlueAxis\Documents\UPD\Code\school\197\ME8_Containerization_and_Docker\3-building_images>
```